

REMARKS

Claims 2-4, 6-8, 10-12, and 14-30 are pending in the present application. Claims 32 and 33 are hereby canceled. Claims 2-4, 6-8, 10-12, and 14-16 have been amended. Claims 2-4, 6-8, 10-12, 14-17 and 24 are independent claims. The Examiner is respectfully requested to reconsider the outstanding rejections in view of the above amendments and the following remarks.

Election/Restrictions

The Examiner asserts that claims 32-33 are directed to an invention that is independent or distinct from the invention originally claimed. Further, the Examiner asserts that the originally claimed invention has been constructively elected by original presentation and, thus, has withdrawn claims 32-33 from consideration. Without conceding the validity of this restriction, Applicants have canceled claims 32 and 33.

Rejection Under 35 U.S.C. § 102

Malcolm

Claims 3, 7, 11, and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,781,540 to Malcolm et al. (hereafter "Malcolm"). This rejection is respectfully traversed.

Initially, Applicants point out that various clarifying amendments were made to the aforementioned claims. It is respectfully submitted that such amendments are intended merely to clarify the claimed invention, not to narrow the scope in order to overcome this rejection.

Independent claims 3, 7, 11, and 15 each recites a communication system or method that transmits data bits according to a periodic transmission timing, where each period of the transmission timing includes a data transmission time and a quasi-data transmission time.

Further, these claims recite assigning bits in such a manner that all the bits in each symbol are transmitted during the same period of the transmission timing.

Conversely, Malcolm discloses a mobile satellite communication system for transmitting data in traffic bursts, not according to a periodic timing. See col. 1, lines 6-16; col. 1, line 66 – col. 2, line 7. Since Malcolm does not teach or suggest a periodic transmission timing, there is no teaching or suggestion in Malcolm of assigning bits in such a manner that all the bits in each symbol are transmitted during the same period of the transmission timing, as claimed.

Further, Malcolm does not contemplate a transmission timing in which each period includes a data transmission timing and quasi-data transmission timing (e.g., the FEXT and NEXT sections illustrated in Fig. 25). As such, Malcolm does not contemplate a situation where some periods might only be able to include 3 bitmap A's, while other periods could include 4 bitmap A's, as illustrated in Fig. 25. Accordingly, Malcolm does not teach or suggest a system/method that is capable of distributing bits differently for a period including 3 bitmap A's than it does for a period including 4 bitmap A's, in order to ensure that the bits of each symbol are transmitted during the same period. This is further evidence that Malcolm fails to teach or suggest the aforementioned claimed features.

At least for the reasons set forth above, Applicants respectfully submit that claims 3, 7, 11, and 15 are allowable over Malcolm. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Chow

Claims 2, 4, 6, 8, 10, 12, 14, 16, 17, and 24 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,009,122 to Chow (hereafter "Chow"). This rejection is respectfully traversed.

Applicants respectfully submit that the above amendments of claims 2, 4, 6, 8, 10, 12, and 14 are intended to clarify the claimed subject matter, not to further narrow the scope in order

to overcome this rejection. Specifically, these claims have been amended to even more clearly point out that it is the data bits already organized into symbols that are assigned to the bit spaces allocated for transmission.

Thus, as recited in claims 2, 4, 6, 8, 10, 12, 14, 16, 17, and 24, the claimed invention organizes the received data bits into units of symbols before assigning them to the bit spaces allocated for transmission. Chow fails to teach or suggest this feature.

Chow teaches a device and method for allocating bits to a superframe in an ADSL communication system. Chow's invention calculates a number of bits that each frame in the superframe can support, uses this calculation result to determine an aggregate total number of bits in the superframe, truncates the number of bits in the superframe to an available network rate, and then allocates the data bits to each frame using "known techniques" (i.e., as fully as possible) (see col. 14, line 51 – col. 15, line 8). According to Chow, each frame in this superframe corresponds to a DMT symbol (see col. 9, lines 4-6, "...each frame being associated with a DMT symbol").

As such, in Chow, the process of assigning data bits to frames is synonymous with organizing them into units of symbols. Accordingly, Chow fails to teach or suggest organizing the data bits into symbols before assigning them to the bit spaces allocated for transmission, as claimed.

At least for the reasons set forth above, Applicants respectfully submit that claims 2, 4, 6, 8, 10, 12, 14, 16, 17, and 24 are in condition for allowance. Accordingly, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Rejection Under 35 U.S.C. § 103

Claims 18-23 and 25-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chow. In this rejection, Applicants respectfully submit that the Examiner has failed to propose any modification of Chow that remedies the deficiencies set forth above in connection

with independent claims 17 and 24. Accordingly, Applicants respectfully submit that claims 18-23 and 25-30 are allowable at least by virtue of their dependency on claims 17 and 24. Thus, the Examiner is respectfully requested to reconsider and withdraw this rejection.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request the Examiner to reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

Should the Examiner believe that any outstanding matters remain in the present application, the Examiner is respectfully requested to contact Jason W. Rhodes (Reg. No. 47,305) at the telephone number of the undersigned to discuss the present application in an effort to expedite prosecution.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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